## Fall 2014 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including USACE Erosion Survey

#### Sacramento River Basin

MA0013	Overall LMA	Total LMA						
Sutter Maintenance Yard Maintenance	Rating	Miles						
Area 0013	Α	41.03						
Date d Itare		Maintena	nce Deficiancy		Enforc	ement		& System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee				ı				
Vegetation					0.08			
Trim / Thin Trees	0.30		0.30	0.73%				
Encroachments	0.15		0.15	0.37%	11.33			
Slope Stability	0.01		0.01	0.02%				
Erosion / Bank Caving	0.02		0.02	0.05%				
Supplemental			T =	T				
USACE Erosion Survey	0.01		0.01	0.02%				
DWR UCIP Field Study					0.52	0.08		
LMA Totals:	0.49	0.00	0.49	1.19%	11.93	0.08	0.00	0.00
Unit No. 01 Cherokee Canal RB	Overall Unit Rating	Total Unit Miles						
MA0013	Α	18.19						
	Maintenance Deficiancy		Enforcement		Design & System Obsolescence			
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	1	
Earthen Levee								
Vegetation					0.07			
Trim / Thin Trees	0.03		0.03	0.17%				
Encroachments	0.04		0.04	0.22%	4.90			
Slope Stability	0.01		0.01	0.06%				
Supplemental								
USACE Erosion Survey	0.01		0.01	0.06%				
DWR UCIP Field Study					0.22	0.01		
Unit Totals:	0.09	0.00	0.09	0.50%	5.19	0.01	0.00	0.00
Unit No. 02 Cherokee Canal LB	Overall Unit Rating	Total Unit Miles						
MA0013	Α	22.84						
		Maintena	nce Deficiancy		Enforc	ement		& System
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles			U Miles
Earthen Levee								
Vegetation					0.01			
Trim / Thin Trees	0.27		0.27	1.18%				
Encroachments	0.11		0.11	0.48%	6.43			
Erosion / Bank Caving	0.02		0.02	0.09%				
Supplemental		<u> </u>						
- 1					0.30	0.07		
DWR UCIP Field Study	1				0.00	0.01		

## **LMA District Cover Sheet**

#### Fall 2014 Levee Inspection Results

## **Sutter Maintenance Yard Maintenance Area 0013**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)					
* Overall LMA Rating (Fall Only)	Only) A								
	** Non-receipt of Su	mmer or Winter Insp	ection Reports may effect	ct overall annual rating					
* SPRING INSPECTIONS: Overall maintenance deficiencies are rated  FALL INSPECTIONS: The overall maintena	I using the same crite	ria in the spring and i	n the fall.						
			ended to be an indiction						
comments									

#### **Unit Cover Sheet**

#### Fall 2014 Levee Inspection Results

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles
Unit No. 01 Cherokee Canal	Right	18.19

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	03/20/2014 - 03/20/2014		11/20/2014 - 11/20/2014	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Jason Cooper Sutter Maintenance Yard		Jason Cooper Sutter Maintenance Yard	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

MA0013

#### Flood Control Project Maintenance Levee Inspections

## Levee Inspection Report By Mile - Fall 2014

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start		Rating **	Α	Issue No.		1		
LM End		Issue Type +	Ма	Location *		LS		
Earthen Levee				GPS La	atitud	le/Longitude		
Category				Start		End		
Item	Operations & Maintenance				0		0	
пеш	Manuals	Manuals			0		0	
DWR ID	DWR_MA0	013_01_s _ 201	3_1					
		Action/	Comme	nts				
Inspector (	Comments	: The LMA ha	s the O	&M manuals	3.			

No Photos

Rating \*\* Issue No. LM Start Α 8 Issue Type + Location \* LS Ma LM End Earthen Levee GPS Latitude/Longitude Category Start End **Emergency Supplies &** Item Equipment DWR ID DWR MA0013 01 s 2013 8 Action/Comments

No Photos

Inspector Comments: The LMA has adequate flood fight supplies and equipment.

LM Start		Rating **	Α	Issue No.		16	
LM End		Issue Type +	Ма	Location *		LS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Calegory			Start		End		
Item	Flood Pre	paredness &	Training		0		0
item					0		0
DWR ID	DWR_MA0	013_01_s _ 201	3_16				
		Action/	Commer	nts			

Inspector Comments: The LMA completed flood fight training in 2014.

No Photos

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	0.49	Rating **	М	Issue No.		43
LM End	0.49	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroachments			39.5911	53 °	39.591153 °
пеш				-121.7018	83 °	-121.701883 °
DWR ID	DWR_MA0	013_01_f _ 201	4_43			
		Action/	Comme	nts		
Prunings						

Photo 1 of 1: FA\_2014\_MA0013\_300\_43\_20141126\_00012.jpg



View of the prunings along the landside slope.

LM Start	0.60	Rating **	М	Issue No.		19	
LM End	0.60	Issue Type +	Ма	Location *		WS	
Category	evee	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Slope Sta	bility		39.5901	73 °	39.590173 °	
пеш				-121.7006	17 °	-121.700617 °	
DWR ID	DWR ID DWR_MA0013_01_s _ 2013_19						
	Action/Comments						

Repair the levee slope damaged by vehicle traffic and prevent access where possible.

# Photo 1 of 1: FA\_2014\_MA0013\_300\_19\_20141013\_00010.jpg



View of the vehicle erosion along the waterside slope.

LM Start	0.66	Rating **	M	Issue No.		14	
LM End	1.20	Issue Type +	En	Location *		LS	
Category	Earthen L	.evee		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	Encroach	ncroachments		39.589272 °		39.581472	0
пеш				-121.7005	99 °	-121.700518	0
DWR ID	DWR_MAG	013_01_s _ 201	12_14				
		Action/	Comme	nts			
Ditch							

## Levee Inspection Report By Mile - Fall 2014

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	0.76	Rating **	М	Issue No.		12	
LM End	0.78	Issue Type +	Ма	Location *	LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory			Start		End		
Item	Encroachments			39.5879	05 °	39.587505 °	
пеш				-121.700822 °		-121.700880 °	
DWR ID	DWR_MA0	DWR_MA0013_01_s _ 2012_12					
		Action/	Comme	nts			
Equipmen	t						



View of the equipment along the landside toe of the levee.

Photo 1 of 1: FA\_2014\_MA0013\_300\_20\_20141013\_00011.jpg

LM Start	0.97	Rating **	М	Issue No.		20	
LM End	0.97	Issue Type +	En	Location *	LS		
Category Earthen Levee			GPS La	le/Longitude			
			Start		End		
Item	Encroachments			39.584885 °		° 39.584885 °	
item			-121.700487 °		-121.700487 °		
DWR ID	DWR_MA0	013_01_s _ 201	13_20				
		Action/	Comme	nts			
Prunings							



View of the prunings along the landside toe.

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

1.70	Rating **	M	Issue No.		4	
1.70	Issue Type +	En	Location *	LS		
Suppleme	ental		GPS Lat	itud	e/Longitude	
			Start		End	
DWR UCI	P Field Study		39.57581	6°	39.575816	۰
			-121.70290	o°	-121.702900	۰
DWR_MA0	013_01_f _ 201	4_4				
	1.70 Suppleme	1.70 Issue Type + Supplemental  DWR UCIP Field Study	1.70 Issue Type + En	1.70         Issue Type +         En         Location *           Supplemental         GPS Lat           Start         Start           DWR UCIP Field Study         39.575810           -121.702900	1.70         Issue Type +         En         Location *           Supplemental         GPS Latitud           Start         Start           DWR UCIP Field Study         39.575816 °           -121.702900 °	1.70         Issue Type +         En         Location *         LS           Supplemental         GPS Latitude/Longitude           Start         End           DWR UCIP Field Study         39.575816 °         39.575816 °           -121.702900 °         -121.702900

Action/Comments

Inspector Comments: FS\_ID:36727

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Crossing has 4-inch pipe inside blocking positive closure/notify landowner to remove prior to flood season. LS crossing is blocked about 50% by sediment build up. Burrow activity present on LS near crossing/15/2013 Same as last inspection/12/2/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee, 7.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete headwall on the landward side. 36-inch concrete standpipe in the channel with 2 piles to deflect debris (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.69).

FS Date: 6/3/2014 7:41:03 AM

LM Start	2.36	Rating **	M	Issue No.		21
LM End	2.36	Issue Type + En Location		Location *		LS
Category	Suppleme		GPS Latitude/Longitude			
Category			Start		End	
Item	DWR UCI	DWR UCIP Field Study			34 °	39.566434 °
item				-121.7037	50°	-121.703750 °
DWR ID	DWR_MA0013_01_f _ 2014_21					·
			_			

Action/Comments

Inspector Comments: FS\_ID:36728

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Non functional crossing due to LS headwall buried. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0119 for no inlet or outlet visibl₹/15/2013 Same as last inspection2/2/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal irrigation pipe through the levee 7.8 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe continues across channel. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in

O&M manual (HLM 2.35). FS Date: 6/3/2014 7:45:23 AM No Photos

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	3.07	Rating **	М	Issue No.		22	
LM End	3.07	Issue Type +	En	Location *	LS		
Category	Suppleme	ental	GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.55627	76 °	39.556276	0
item				-121.7065	10°	-121.706510	0
DWR ID	DWR_MA0	013_01_f _ 201	4_22				

No Photos

Action/Comments

Inspector Comments: FS\_ID:36730

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Crossing not visible during the Spring 2012 Inspection. Attempt to find crossing during next inspection when slopes are cleared of vegetation 15/2013 Same as last inspection. Unable to locate 2/2/2013 Unable to locate /21/2014 Same as last

inspection.

FIELD\_STRUCT\_DESC: 24-inch drainpipe through the levee, flap gate

on waterward end. Concrete headwall on both ends.

FS Date: 6/3/2014 7:47:34 AM

	LM Start	3.80	Rating **	M	Issue No.	23		
	LM End	3.80	Issue Type +	En	Location *	LS		
	Category	Suppleme	ental	GPS Latitude/Longitude				
					Start		End	
	Item	DWR UCIP Field Study			39.5463	17 °	39.546317	0
	item				-121.7075	10°	-121.707510	0
	DWR ID	DWR_MA0	013_01_f _ 201	4_23				
				_				

Action/Comments

Inspector Comments: FS\_ID:36735

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS slide gate covered with silt. Slide gate is bent. Crossing appears not be in use. Limited inspection on WS and LS

slope due to dense vegetation. Need photos of cleared

slope \$\infty\)/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate is still bent and silted over 2/2/2013 Same as last inspection5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Screw gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.82).

FS Date: 6/3/2014 7:57:08 AM

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	4.13	Rating **	М	Issue No.		18	
LM End	4.20	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude	
				Start		End	
Item	Vegetation			39.5416	60°	39.540651 °	
item			-121.707408 °		-121.707404 °		
DWR ID	DWR_MA0	013_01_s _ 201					
		Action/	Comme	nts			
Landscapi	ng						



View of the redwood trees along the landside slope.

Rating \*\* Issue No. LM Start 4.42 24 Issue Type + En Location \* LS LM End 4.42 Supplemental GPS Latitude/Longitude Category End DWR UCIP Field Study 39.537516° 39.537516 Item -121.707580° -121.707580 DWR MA0013 01 f 2014 24 DWR ID

Action/Comments

Inspector Comments: FS\_ID:36737

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Minor debris on landside inlet. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0189 for sediment and grass blocking WS and L5/15/2013 Same as last inspection2/2/2013 Same as last inspection5/21/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainpipe through the levee, 9.1 feet below The crown. Flap gate on the waterward end. Slide gate on landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 4.43). FS Date: 6/3/2014 8:00:52 AM

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	5.42	Rating **	М	Issue No.	25				
LM End	5.42	Issue Type +	En	Location *		LS			
Category	Suppleme	GPS Latitude/Longitude							
Calegory				Start		End			
Item	DWR UCIP Field Study			39.52323	3°	39.523236	0		
пеш		-121.70765	°	-121.707650	0				
DWR ID	DWR_MA0								
	Action/Comments								

Action/Comments

Inspector Comments: FS\_ID:36739

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Minor vegetation on LS slope. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0204 for restriction view of gates/15/2013 Same as last inspection12/2/2013 Same as last inspection5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 8.4 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.43).

FS Date: 6/3/2014 8:04:24 AM

LM Start	5.72	Rating **	М	Issue No.		26
LM End	5.72	Issue Type +	En	Location *		LS
Category	Suppleme	ental		GPS La	atitud	le/Longitude
Calegory				Start		End
Item	DWR UCI	P Field Study		39.5192	12 °	39.519212 °
пеш				-121.7090	30°	-121.709030 °
DWR ID	DWR_MA0	013_01_f _ 201	4_26			

Action/Comments

Inspector Comments: FS\_ID:36745

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: High sedimentation build up at WS and LS headwall. Limited inspection due to dense vegetation on WS and LS slope. Need photo of cleared WS and LS slopes. This crossing was listed in the

USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13D\_2011\_p\_0210 for WS gate

submerged/15/2013 Slopes have been cleared of vegetation and are in good condition. WS headwall and flapgate are fully covered in debris and not visible. Need to clear2/2/2013 Same as last

inspectios/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 9.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual

(HLM 5.73).

FS Date: 6/3/2014 8:14:41 AM

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	5.96	Rating **	М	Issue No.		27	
LM End	5.96	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	P Field Study		39.51605	9°	39.516059	۰
пеш				-121.71081	0 °	-121.710810	٥
DWR ID	DWR_MA0	013_01_f _ 201	4_27				

No Photos

Action/Comments

Inspector Comments: FS\_ID:36746

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Burrow activity near crossing; burrow holes present on L\$/15/2013 Same as last inspection 12/2/2013 Same as last

inspectios/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 6.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.97).

FS Date: 6/3/2014 8:15:50 AM

LM Start	6.33	Rating **	М	Issue No.		28	
LM End	6.33	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	atitud	e/Longitude	
Category				Start		End	
Item	DWR UC	IP Field Study		39.5113	37 °	39.511337	, 0
пеш				-121.7136	20 °	-121.713620	٥
DWR ID	DWR_MAG	013_01_f _ 201	4_28				

Action/Comments

Inspector Comments: FS\_ID:36747

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS slide gate is buried. Pipe is not visible on LS toe. Limited inspection on WS slope due to dense vegetation described with the large slope has been cleared of vegetation and is in good condition. LS screw gate is still buried2/2/2013 Same as last

inspectios 21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 7.4 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.34).

FS Date: 6/3/2014 8:16:40 AM

No Photos

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	6.51	Rating **	М	Issue No.		3
LM End	7.09	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		39.5089	28 °	39.501438 °
item				-121.7148	42 °	-121.719715 °
DWR ID	DWR_MA0	013_01_s _ 201	2_3			
		Action/	Comme	nts		
Ditch						



View of the agricultural ditch along the toe.

LM Start	6.55	Rating **	U	Issue No.		29	
LM End	6.55	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.5083	09 °	39.508309 °	>
пеш				-121.7151	° 00	-121.715100 °	>
DWR ID	DWR_MA0	013_01_f _ 201	4_29				

Action/Comments
Inspector Comments: FS\_ID:36748

EP\_NO: 5200B Repair Type: Urgent Crossing Status: Found

UCIP Comments: Hole behind flashboards against slide gate on LS slope (Health and Safety Issue). Limited inspection on WS slope due to dense vegetation. Need photo of cleared slope on W\$/15/2013 WS slope has been cleared of vegetation and is in good condition. Hole is still present behind flash boards on L\$2/2/2013 Same as last inspectios 5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 10 items under Board Order 5200, 5200A, and 5200B: 24-inch corrugated metal drainpipe through the levee, 7.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete head wall on both ends (Board Order 5200B-1965). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.56).

FS Date: 6/3/2014 8:19:07 AM

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	6.56	Rating **	М	Issue No.		30	
LM End	6.56	Issue Type +	En	Location *		LS	
Category	Suppleme	olemental GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UC	P Field Study		39.50829	8°	39.508298	0
пеш				-121.71510	o °	-121.715100	0
DWR ID	DWR_MA0	013_01_f _ 201	4_30				

Action/Comments

Inspector Comments: FS\_ID:36749

EP\_NO: 5200B

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Clear wooden debris on upstream headwall. Upstream location latitude = 39.508298, longitude = -121.715103. Downstream location latitude = 39.50797, longitude = -121.71534; /15/2013 Same as last inspection 12/2/2013 Same as last

inspectio5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 10 items under Board Order 5200, 5200A, and 5200B: 36-inch concrete reinforced drain pipe through levee along landward shoulder, 11.1 feet below crown. Crossing saddles landward slope, open on both ends. (Board Order 5200B-1967)

FS Date: 6/3/2014 8:20:08 AM

	Photo 1 of 1: FA 2	2014 MA0013 300	_2_20141013_00001.jpg	
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No Photos



View of a concrete block along the toe.

LM Start	6.63	Rating **	М	Issue No.		2		
LM End	6.63	Issue Type +	Ma	Location *		LS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Category				Start		End		
Item	Encroach	ments		39.5073	37 °	39.507337 °		
пеш				-121.7156	93 °	-121.715693 °		
DWR ID	DWR_MA0	013_01_s _ 201	12_2					
		Action/	Comme	nts				
Material								

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	7.09	Rating **	М	Issue No.		31	
LM End	7.09	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	atitud	le/Longitude	
Calegory				Start		End	
Item	DWR UC	IP Field Study	,	39.5014	79 °	39.501479	0
пеш				-121.7197	10 °	-121.719710	0
DWR ID	DWR_MA0	013_01_f _ 201	4_31				

Action/Comments

Inspector Comments: FS\_ID:36755

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LMA's inspection sheet of 2011 indicates settlement and visible corrosion. Damage/severe corrosion on screw gate where it bolts to headwall. No visible signs of settlement due to high vegetation cover. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared slopes for this crossing/15/2013 Slopes have been cleared of vegetation and are in good condition. There were no apparent signs of settling. LS screw gate is still damaged2/2/2013 Same as last inspectio5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 9.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.10).

FS Date: 6/3/2014 8:33:41 AM

LM Start	7.33	Rating **	М	Issue No.		32
LM End	7.33	Issue Type +	En	Location *		LS
Category	Suppleme	ental	al G			de/Longitude
Calegory				Start		End
Item	DWR UC	P Field Study		39.4988	15 °	39.498845 °
iteiii				-121.7224	10°	-121.722440 °
DWR ID	DWR_MA0	013_01_f _ 201	4_32			

Action/Comments

Inspector Comments: FS\_ID:36756

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS slide gate stem is bent and needs to be replaced. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared slopes during next inspection. Confirmed flap gate on WS. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#USACE\_CESPK\_M13D\_2011\_p\_0244 for submerged WS gat@/15/2013 Slopes have been cleared of vegetation and are in good condition. LS screw gate stem is still bent2/2/2013 Same as last inspectio5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 11.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwall on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 7.34).

FS Date: 6/3/2014 8:37:19 AM

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	7.82	Rating **	Α	Issue No.		44
LM End	7.82	Issue Type +	Ma	Location *		LS
Category Earthen Levee			GPS La	titud	le/Longitude	
Calegory	Category			Start		End
Itom	Vegetatio	n		39.49289	92 °	39.492892 °
item	Item			-121.72713	35 °	-121.727135 °
DWR ID DWR_MA0013_01_f _ 2014_44					·	
	Action/Comments					

Control annual grass and weeds on the levee slopes and easements.



View of the controlled vegetation on both slopes.

LM Start	8.12	Rating **	М	Issue No.		33
LM End	8.12	Issue Type +	En	Location *		LS
Category	Suppleme	ental	GPS La	ituc	le/Longitude	
Calegory				Start		End
Item	DWR UC	P Field Study		39.48906	1°	39.489061 °
item				-121.72943	o°	-121.729430 °
DWR ID	DWR_MA0	013_01_f _ 201	4_33			

Action/Comments

Inspector Comments: FS\_ID:36761

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Sediment build up against flashboards. Flashboards are in use on landside of leve ₹/15/2013 Same as last

inspection12/3/2013 Same as last inspection5/21/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 8.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.12). FS Date: 6/3/2014 8:48:50 AM

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	8.40	Rating **	М	Issue No.		34	
LM End	8.40	Issue Type +	En	Location *		LS	
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		39.48543	2°	39.485432	0
пеш				-121.73159	°	-121.731590	0
DWR ID	DWR_MA0	013_01_f _ 201	4_34				

No Photos

Action/Comments

Inspector Comments: FS\_ID:36762

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Sediment build up on LS. Debris (broken panels) scattered near LS headwall. Limited inspection on WS and LS slope due to dense vegetation. Need photos of cleared WS and LS slope\$/15/2013 Slopes are cleared of vegetation and are in good condition. WS flapgate is blocked from opening fully by sediment2/3/2013 Same as last inspectio5/21/2014 Same as

last inspection

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 9.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). Flashboards should be present on the landward side. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.40).

FS Date: 6/3/2014 8:49:55 AM

LM Start	8.95	Rating **	M	Issue No.		35	
LM End	8.95	Issue Type +	En	Location *		LS	
Category	Suppleme	ental		GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	DWR UC	P Field Study		39.47857	'3 °	39.478573	٥
пеш				-121.73655	0°	-121.736550	0
DWR ID	DWR_MAG	013_01_f _ 201	4_35				

Action/Comments

Inspector Comments: FS ID:36763

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Concrete headwall is cracked, erosion behind headwall is also present. LS headwall needs to be repaired/replaced. Remove wooden debris from levee shoulde 7/15/2013 Same as last inspection2/3/2013 Same as last inspection5/21/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: Richvale Irrigation Canal siphon crosses the channel. Five (5) by seven (7) foot concrete conduit through the levee. 18.4 feet below the crown. Distribution box and walkway are located on waterward side. Concrete headwall on the landward side. 28-foot reinforced concrete protective slab on top of the conduit in the center of the levee (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 8.95).

FS Date: 6/3/2014 8:51:12 AM

No Photos

Location LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma: Maintenance Deficiancy

Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	9.84	Rating **	М	Issue No.		5	
LM End	9.87	Issue Type +	Ma	Location *	LS		
Catagoria Earthen Levee				GPS La	atitud	le/Longitude	
Category	nly			Start		End	
Item	Trim / Thi	n Trees		39.4671	70°	39.466860 °	
item				-121.7438	87 °	-121.744108 °	
DWR ID	DWR ID DWR_MA0013_01_s _ 2012_5						
	Action/Comments						

Trim trees to at least five feet above ground level.



Trim the trees along the landside slope and toe.

LM Start	9.89	Rating **	М	Issue No.		10			
LM End	9.89	Issue Type +	Ma	Location *	LS				
Category	Cotogon Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End				
Item	Encroach	Encroachments			35 °	39.466635 °			
пеш				-121.7442	28 °	-121.744228 °			
DWR ID	DWR_MA0	013_01_f _ 201	3_10						
		Action/	Comme	nts					
Material									

Photo 1 of 1: FA\_2014\_MA0013\_300\_10\_20141013\_00005.jpg



View of a trailer & material along the L/S toe.

LM Start	11.20	Rating **	М	Issue No.		17		
LM End	13.47	Issue Type +	En	Location *		WS		
Category	Earthen L	evee		GPS Latitude/Longitude				
Calegory				Start End				
Item	Encroach	ments		39.449777 °		39.421255 °		
пеш				-121.7551	03 °	-121.774893 °		
DWR ID	DWR_MA0	013_01_s _ 201	12_17			·		
Action/Comments								
Ditch								





View of the agricultural ditch along the toe of the levee.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	11.75	Rating **	М	Issue No.	11		
LM End	11.76	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	USACE E	rosion Survey	,	39.44282	°	39.442738	0
пеш					°	-121.759908	0
DWR ID	DWR_MAG	013_01_f _ 201	4_11				
		A ation /	Camma.	o t o			

No Photos

Action/Comments

Inspector Comments: 2011 - Small erosion pocket likely caused by irrigation diversion structure. 2013: Site is part of the extended inventory, last inspected 2011. [2013 Site ID: CHK\_11-7\_R]

LM Start	12.36	Rating **	М	Issue No.	36			
LM End	12.36	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	P Field Study	,	39.43516	9°	39.435169°		
item				-121.76529	00°	-121.765290 °		
DWR ID	DWR_MA0	013_01_f _ 201	4_36					
	Action/Comments							

No Photos

Inspector Comments: FS ID:36777

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS and LS slope due to dense vegetation. WS outlet of pipe not found. Need photos of cleared WS and LS slopes. Determine if WS outlet daylights after WS slope is cleared/15/2013 Slopes have been cleared of vegetation and are in good condition. Still no sign of WS end of pipe 2/3/2013 Same as last inspectios/21/2014 Same as last inspection.

FIELD STRUCT DESC: 30-inch corrugated metal pipe through the levee, 11.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 12.38)

FS Date: 6/3/2014 9:45:58 AM

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	13.50	Rating **	М	Issue No.		37	
LM End	13.50	Issue Type +	En	Location *		WS	
Category	Suppleme	ental	GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UC	P Field Study		39.42092	20 °	39.420920	0
item				-121.77530	00°	-121.775300	0
DWR ID	DWR_MA0	013_01_f _ 201	4_37				

Action/Comments

Inspector Comments: FS\_ID:36780

EP\_NO: 17030

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Attempt to locate this crossing during next inspection

when tall grass is cleared from slopes-look for utility

marker \$\frac{3}{15}/2013 \text{ Same as last inspection. Unable to locate any marker\$2/3/2013 Unable to locat 5/21/2014 Same as last

inspection.

FIELD\_STRUCT\_DESC: Three 2-inch-diameter and Three 1.5-inchdiameter conduits containing fiber optic cables across and under (bored) Cherokee Canal and its levees. The permit indicates the conduits must be bored at least 5-feet below the bottom of the low flow of the channel. (Permit No. 17030-2000)

FS Date: 6/3/2014 9:54:37 AM

LM Start	13.96	Rating **	М	Issue No.		38
LM End	13.96	Issue Type +	En	Location *		WS
Category	Suppleme	GPS La	tituc	le/Longitude		
Calegory				Start		End
Item	DWR UC	P Field Study	,	39.41683	3°	39.416833 °
item				-121.78193	0 °	-121.781930 °
DWR ID	DWR_MA0	013_01_f _ 201	4_38			·

Action/Comments

Inspector Comments: FS\_ID:36782

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Tree has fallen at LS inlet and damaged slide gate. The tree needs to be removed and screw gate repaired. Limited inspection on LS due to fallen tre@/15/2013 Same as last inspection2/3/2013 Same as last inspection5/22/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal drainpipe through the levee, 12.7 feet below the crown. Flap gate on the waterward side.

Concrete "U" headwall on both ends (USACE-1960).

FS Date: 6/3/2014 9:59:19 AM

No Photos

No Photos

U : Unacceptable

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

13.97	Rating **	М	Issue No.		39	
13.97	Issue Type +	En	Location *	WS		
Suppleme	ental	GPS Lat	itud	e/Longitude		
			Start		End	
DWR UC	P Field Study		39.41675	6°	39.416756	0
			-121.782060		-121.782060	0
DWR_MA0	013_01_f _ 201	4_39				
	13.97 Suppleme	13.97 Issue Type + Supplemental  DWR UCIP Field Study	13.97 Issue Type + En	13.97   Issue Type +   En   Location *   Supplemental   GPS Lat   Start   DWR UCIP Field Study   39.416756   -121.782066	13.97   Issue Type +   En   Location *    Supplemental   GPS Latitud   Start    DWR UCIP Field Study   39.416756 °    -121.782060 °	13.97 Issue Type + En Location * WS           Supplemental         GPS Latitude/Longitude           Start         End           DWR UCIP Field Study         39.416756 ° 39.416756           -121.782060 ° -121.782060         -121.782060

Action/Comments

Inspector Comments: FS\_ID:36783

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Non-functional crossing-buried slide gate on WS. Limited inspeciton on WS and LS slope/toe due to dense vegetation. Need photo of cleared WS & LS slopes or toe. This crossing is listed in the USACE periodic inspeciton report as Corp's Inspection ID# USACE\_CESPK\_M13D\_2011\_p\_0352 for abandoned gate on WS slope/15/2013 Same as last inspection/2/3/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: Abandoned 12 inch steel drainpipe through the levee, 3 feet below the crown. Gate valve on the waterward slope. 1/4-inch steel plate welded on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.97).

(PLN 13.97). FS Date: 6/3/2014 10:00:42 AM

Rating \*\* Μ Issue No. LM Start 14.79 40 ws Issue Type + Location 3 14.79 En LM End GPS Latitude/Longitude Supplemental Category DWR UCIP Field Study 39 409481 39 409481 Item -121.794010 ° -121.794010 ° DWR MA0013 01 f 2014 40 DWR ID

Action/Comments

Inspector Comments: FS\_ID:36784

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on LS slope due to dense vegetation. Need photos of cleared WS & LS slopes. The flap gate is lodged oper 1/15/2013 Slopes have been cleared of vegetation and are in good condition. WS flapgate is still lodged oper 1/2/3/2013 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal drainpipe through the levee, 12.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 14.79).

FS Date: 6/3/2014 10:02:17 AM

No Photos

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	15.23	Rating **	A/W	Issue No.		45	
LM End	15.23	Issue Type +	Ma	Location *		WS	
Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Animal Co	ontrol		39.4055	42 °	39.405542	0
item				-121.8003	92 °	-121.800392	0
DWR ID DWR_MA0013_01_f _ 2014_45							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.



View of the rodent hole on the waterside slope.

LM Start	15.99	Rating **	М	Issue No.		41				
LM End	15.99	Issue Type +	En	Location *		Location *		Location *		WS
Supplemental				GPS Latitude/Longitude						
Calegory	Category			Start		End				
Item	DWR UC	P Field Study		39.39861	5 °	39.398615 °				
пеш			-121.81125	0 °	-121.811250 °					
DWR ID	DWR_MA0	013_01_f _ 201	4_41			·				

Action/Comments

Inspector Comments: FS\_ID:36787 EP\_NO: 11805B Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS inlet is not visible-underwater. Limited inspection on WS and LS slope/toe due to dense vegetation. Need photos of

cleared WS & LS slopes/15/2013 Same as last

inspection 2/3/2013 Same as last inspection 5/22/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: 48-inch diameter reinforced concrete pipe with six concrete collars through the levee, 14.4 feet below the crown to center of conduit. Slide gate, head-wall and wood walkway on two concrete piers on waterward side of levee. Revetment on waterward slope. Irrigation ditch on the landward side. (Permit No. 11805B-1979) FS Date: 6/3/2014 10:05:44 AM

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	16.45	Rating **	М	Issue No.		7
LM End	17.42	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroach	ments		39.3945	23 °	39.385580 °
пеш				-121.8176	30°	-121.831282 °
DWR ID	DWR_MA0	013_01_s _ 201	12_7			
		Action/	Comme	nts		
Ditch						



View of the ag along the toe of the levee.

LM Start	17.42	Rating **	М	Issue No.	42		
LM End	17.42	Issue Type +	En	Location *		LS	
Supplemental			GPS La	titud	le/Longitude		
Category			Start		End		
Item	DWR UC	P Field Study		39.38554	40 °	39.385540	0
itein			-121.83128	30°	-121.831280	0	
DWR ID	DWR_MA0	013_01_f _ 201	4_42				
Action/Comments							

Inspector Comments: FS\_ID:36789

EP\_NO: 3511

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Unable to determine if cable is still in use, per permit records indicate communication cable was installed in 1961, 1968 USACE requested to abandon line, 1974 USACE communication is not abandoned. Cable crosses multiple levees/15/2013 Same as last inspection. Unable to locate/2/3/2013 Unable to locate/22/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: U.S. Army communication cable through the

levee, 3.0 feet below the crown. (Permit No. 3511-1961)

FS Date: 6/3/2014 10:08:17 AM

## Levee Inspection Report By Mile - Fall 2014

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Cherokee Canal	Right	18.19	11/20/2014 11/20/2014	Bob Duffey

LM Start	17.71	Rating **	М	Issue No.		9
LM End	17.75	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	ments		39.3829	43 °	39.382635
пеш			-121.8354	47 °	-121.836012	
DWR ID	DWR_MAG	013_01_s _ 201	12_9			
		Action/	Comme	nts		
Ditch						

No Photos

LM Start	17.72	Rating **	М	Issue No.		15	
LM End	18.20	Issue Type +	En	Location *		LS	
Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Item	Encroach	ments	nents			39.378481	0
пеш				-121.8356	54 °	-121.842394	0
DWR ID	DWR_MA0	013_01_s _ 20°	12_15				
		Action/	Comme	nts			
Ditch							

No Photos

+ Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

#### **Unit Cover Sheet**

#### Fall 2014 Levee Inspection Results

## **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles
Unit No. 02 Cherokee Canal	Left	22.84

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	03/25/2014 - 03/25/2014		11/20/2014 - 11/20/2014	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Jason Cooper Sutter Maintenance Yard		Jason Cooper Sutter Maintenance Yard	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

MA0013

#### **Flood Control Project Maintenance** Levee Inspections

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	0.05	Rating **	М	Issue No.		1	
LM End	0.15	Issue Type +	Ma	Location *	WS		
Category	Earthen L	evee		GPS La	atituc	le/Longitude	
Calegory				Start		End	
Item	Encroach	ments	ments			39.572455 °	
пеш				-121.7013	87 °	-121.702370 °	
DWR ID	DWR_MA0	013_02_s _ 201	12_1				
		Action/	Comme	nts			
Equipmen	t						

No Photos

Rating \*\* Issue No. LM Start 0.58 Μ 5 Issue Type + En Location \* WS LM End 0.58 Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 39.566479° 39.566479 ° Item -121.702430 ° -121.702430 ° DWR MA0013 02 f 2014 5 DWR ID

Action/Comments

Inspector Comments: FS ID:36804

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Need to fix the top of slide gate cover. The wooden cap on standpipe is broken. Limited evaluation of crossing due to dense vegetation on LS slope. Need photos of cleared slopes during fall inspection /10/2013 LS and WS slopes have been cleared of vegetation and are in good condition. LS pipe end is half full of sediment. Sediment inside of WS standpipe may hinder slide gate from fully closing. Standpipe cover is still broken2/9/2013 Same as last inspectios/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through the levee, 10.6 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. 36-inch concrete standpipe in the channel with two wooden piles to deflect debris. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 0.57).

FS Date: 6/3/2014 11:59:03 AM

No Photos

Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	1.71	Rating **	М	Issue No.		9		
LM End	1.71	Issue Type +	En	Location *		WS		
Category				GPS Latitude/Longitude				
Category			Start		End			
Item	DWR UC	P Field Study		39.55117	3°	39.551178	0	
пеш				-121.705660 °		-121.705660	0	
DWR ID	DWR_MA0							

Action/Comments

Inspector Comments: FS\_ID:36806

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection dense vegetation on WS. Need photos of clear WS slope & toe. Ditch present in channel? This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13G\_2011\_p\_0108 for WS flap gate filled with soil and LS gate not functioning becasue of overgrown vegetation/10/2013 WS slope is cleared of vegetation and is in good condition. LS screw gate frame is twisted and is preventing the gate from opening/2/9/2013 Same as last inspection/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch CM drainage pipe through the levee, 7.9 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. Slide gate at the landward toe in headwall (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 1.70). In 1962, permit number 3953 was issue for existing pump structure, intake box, ditch and power pole. In 1963, the pump and intake box were removed.

FS Date: 6/3/2014 12:01:30 PM

LM Start	2.55	Rating **	М	Issue No.		10	
LM End	2.55	Issue Type +	En	Location *		WS	
Category	Suppleme	ental	GPS Latitude/Longitude				
Category				Start		End	
Item	DWR UCIP Field Study			39.53919	5 °	39.539195	0
item				-121.706070 °		-121.706070	0
DWR ID	DWR_MA0						

Action/Comments

Inspector Comments: FS\_ID:36807

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Handle missing on slide gate/10/2013 Sediment is built up against WS flap gate not allowing it to open. Handle for LS slide gate is still missing/2/9/2013 Same as last

inspectios 1/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 2: 36-inch corrugated metal pipes through the levee, 9.7 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 2.54).

FS Date: 6/3/2014 12:04:08 PM

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	2.64	Rating **	М	Issue No.		11		
LM End	2.64	Issue Type +	En	Location *		WS	S	
Supplemental Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UC	DWR UCIP Field Study			64 °	39.537864	0	
item				-121.706190 °		-121.706190	0	
DWR ID	DWR_MA0	013_02_f _ 201	4_11					

Action/Comments

Inspector Comments: FS\_ID:36809

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

Crossing Status: Found
UCIP Comments: Minor sediment built up on LS, remove sediment.
Need photo of LS slide gate without sediment build up. This crossing
was listed in the USACE Periodic Inspection report as Corp's inspect
ID# USACE\_CESPK\_M13G\_2011\_p\_0148 for LS gate obstructed by
vegetation and WS flap gate is not functionning (propped
open]/10/2013 Same as last inspection12/9/2013 WS flapgate
was closed but LS slidegate is heavily vegetated and blocked from
closing by sedimer6/29/2014 Same as last inspection.
FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the
levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide
gate on the landward end. Concrete "U" headwalls on both ends
(USACE-1960). Structure used to drain water from Nelson Shippe
Road. This entry matches the Drainage or Irrigation Structure
referenced in O&M manual (HLM 2.63).
FS Date: 6/3/2014 12:11:51 PM

No Photos

N/A : Not Applicable

A : Acceptable

M : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	3.62	Rating **	М	Issue No.		14		
LM End	3.62	Issue Type +	En	Location *		WS		
Category	Suppleme	ental		GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	P Field Study		39.5238	29 °	39.523829	0	
item				-121.7062	90°	-121.706290	0	
DWR ID	DWR_MA0	4_14						
A :: 10								

Action/Comments

Inspector Comments: FS\_ID:36813

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Non-functioning crossing. Farmer uses pipe located at LM 3.682 to drain field & not this one. Dense vegetation-need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13G\_2011\_p\_0172 for no access to WS gate due to high water & dense vegetation /10/2103 LS and WS slopes have been cleared of vegetation and are in good condition. WS flap gate is out of water but is blocked from opening by sediment build up. LS gate is fully submerged and not able to be inspected 2/9/2013 LS slide gate is completely buried by soil and WS flapgate is blocked from opening by sediment. Crossing appears abandoned and nonfunctiona 5/29/2014 Same as last inspection.

FIELD STRUCT DESC: 36-inch corrugated metal pipe through the levee, 11.5 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainange or Irrigation

Structure referenced in O&M manual (HLM 3.61)

FS Date: 6/3/2014 12:25:58 PM

LM Start	3.68	Rating **	М	Issue No.		15		
LM End	3.68	Issue Type +	En	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory				Start		End		
DWR UCIP Field Study			39.52355	6°	39.523556 °			
Item			-121.70534	0 °	-121.705340 °			
DWR ID	DWR_MA0	013_02_f _ 201	4_15					

Action/Comments

Inspector Comments: FS\_ID:36814

EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation makes it difficult to evaluate the condition of the LS slope. Both gates underwater. Recommend taking photos of clear slopes and gates during fall inspection/10/2013 LS slope has been cleared of vegetation and is in good condition. Both gates are still underwater and not able to be inspected 2/9/2013 Same as last inspectios 1/29/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through levee, 9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.67). FS Date: 6/3/2014 12:28:07 PM

No Photos

No Photos

\* Location + Issue Type Ma: Maintenance Deficiancy LS : Land Side N/A: Not Applicable A: Acceptable N : Not Inspected/Rated : Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	3.86	Rating **	М	Issue No.		16		
LM End	3.86	Issue Type +	En	Location *		WS		
Category				GPS Latitude/Longitude				
Calegory		Start		End				
Item	DWR UC	P Field Study		39.52435	0 °	39.524350	٥	
пеш				-121.702180 °		-121.702180	۰	
DWR ID	DWR_MA0013_02_f _ 2014_16							

Action/Comments

Inspector Comments: FS\_ID:36815

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS gate missing & limited inspection. Need photos of WS & LS cleared slopes. Description calls for slide gate on LS-slide gate missing. Debris scattered near LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's Inspect ID# USACE\_CESPK\_M13J\_2011\_p\_0010 for WS gate wedged open & missing LS slide gate/10/2013 WS and LS slopes have been cleared of vegetation and are in good condition. LS gate is still missing and WS flap gate is still wedged open with sticks/2/9/2013 Pulled sticks from WS flap gate to allow it to close. Ls gate is still missing/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 8.8 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 3.85).

FS Date: 6/3/2014 12:30:20 PM

Photo 1 of 1 · FA	2014	MACC13	301	911	20141013	00015 ina	

No Photos



View of agricultural ditch along the toe.

LM Start	4.58	Rating **	М	Issue No.		911
LM End	5.00	Issue Type +	En	Location *	WS	
Category Earthen Levee			GPS La	atitud	le/Longitude	
Category				Start		End
Item	Encroach	Encroachments			58 °	39.537468°
item				-121.6893	60°	-121.690882 °
DWR ID	DWR_MA0	013_02_s _ 201	12_911			
		Action/	Comme	nts		
Ditch						

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

\* Rating
A: Acceptable

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence

Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

5.06	Rating **	М	Issue No.	17		
5.06	Issue Type +	En	Location *	WS		
Suppleme	ental	GPS Latitude/Longitude				
			Start		End	
DWR UC	P Field Study		39.52629	в°	39.526298	۰
			-121.688320		-121.688320	۰
DWR_MA0	013_02_f _ 201	4_17				
	5.06 Suppleme	5.06 Issue Type + Supplemental  DWR UCIP Field Study	5.06 Issue Type + En	5.06         Issue Type +         En         Location *           Supplemental         GPS Lat           Start         Start           DWR UCIP Field Study         39.526296           -121.688326	5.06   Issue Type +   En   Location *    Supplemental   GPS Latitud   Start    DWR UCIP Field Study   39.526298 °    -121.688320 °	5.06         Issue Type +         En         Location *         WS           Supplemental         GPS Latitude/Longitude           Start         End           DWR UCIP Field Study         39.526298 °         39.526298 °           -121.688320 °         -121.688320 °

Action/Comments

Inspector Comments: FS\_ID:36818

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Rusted pipe debris located on WS. Remove pipe debris on WS and monitor the LS erosion near headwall. Rip-rap used to protect LS headwall from erosion. Was pipe exposed prior to dumping rock? Erosion on the LS could have exposed pipe. Dense shrub on the LS could restrict flow/9/2013 Same as last inspection/12/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 8.6 feet below the crown. Flap gate on the waterward end.

Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual

(HLM 5.06).

FS Date: 6/3/2014 12:36:16 PM

LM Start	5.08	Rating **	M	Issue No.		22	
LM End	5.08	Issue Type +	En	Location *		WS	
Category	Suppleme	ental		GPS Latitude/Longitu		e/Longitude	
Calegory				Start		End	
Item	DWR UC	P Field Study		39.52640	0 °	39.526400	0
пеш				-121.68861	0 °	-121.688610	0
DWR ID	DWR_MA0	013_02_f _ 201	4_22				

Action/Comments

Inspector Comments: FS\_ID:36819

EP\_NO: N/A

Repair Type: Non-Urgent

Crossing Status: Indicator Found

UCIP Comments: Markers not present or visible for hazard line (Health & Safety Issue) unknown depth. Owner is not compliant with Title 23. USA flag located on LS however not visible. No permenant markers available only underground service alert (USA) flags. Active line? Will need to contact PG&E and find out the status of line through leve@/9/2013 New carsonite marker installed with concrete access box on LS about 10 feet east of highway 99. Depth is still unknow12/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 6 inch steel gas line through the levee unknown depth. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.08).

FS Date: 6/3/2014 12:37:22 PM

No Photos

No Photos

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	5.34	Rating **	М	Issue No.		23		
LM End	5.34	Issue Type +	En	Location *	WS			
Category	Supplemental			GPS Latitude/Longitude				
Calegory	ory			Start		End		
Item	DWR UC	P Field Study		39.52595	58 °	39.525958 °		
item			-121.69273	30°	-121.692730 °			
DWR ID	DWR_MA0	013_02_f _ 201	4_23					

Action/Comments

Inspector Comments: FS\_ID:36822

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photo of clear WS slope during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0035 non-functional crossing due to overgrown vegetation on WS flap gat@/9/2013

Same as last inspection 12/9/2013 Same as last inspectios/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 5.8 feet below the crown. Flap gate on the waterward side. Slide gate on the landward side. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.34).

FS Date: 6/3/2014 12:40:58 PM

LM Start	5.40	Rating **	М	Issue No.		24	
LM End	5.40	Issue Type +	En	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR UC	P Field Study		39.52536	î1°	39.525361 °	
пеш				-121.69363	° 08	-121.693630 °	
DWR ID	DWR_MA0	013_02_f _ 201	4_24			·	

Action/Comments Inspector Comments: FS\_ID:36823

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS and LS slope due to dense vegetation. Need photos of clear slopes during next inspection. Metal plate bolted on pipe for closure on WS, open on L3/9/2013 Same as last inspection 2/9/2013 Same as last inspection 5/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 6-inch steel pipe through the levee, 1.6 feet below the crown. Plate bolted on the waterward end. Open on the landward end. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.41). FS Date: 6/3/2014 12:42:34 PM

No Photos

No Photos

N : Not Inspected/Rated C : Corrected

+ Issue Type

A/W: Acceptable but Monitor & Maintain

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	5.85	Rating **	М	Issue No.	25		
LM End	5.85	Issue Type +	En	Location *	WS		
Category	Suppleme	Supplemental			tuc	le/Longitude	
Calegory	alegory			Start		End	
Item	DWR UC	IP Field Study		39.52338 <sup>-</sup>	ı°	39.523381	0
пеш				-121.701270	°	-121.701270	0
DWR ID	DWR_MA0	013_02_f _ 201	4_25				
		A ation /	Camma	o t o			

Action/Comments

Inspector Comments: FS\_ID:36824

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Slide gate missing on WS. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0017 for missing slide gat@/9/2013 Same as last inspection12/9/2013 Same as last inspectios/29/2014 Same as last inspection. FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 9.2 feet below the crown. Flap gate on the waterward end. Slide gate on the landward end. Concrete "U" headwalls on both ends (USACE-1960) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 5.85). FS Date: 6/3/2014 12:43:34 PM

No	Photos

No Photos

LM Start	5.86	Rating **	М	Issue No.		26
LM End	5.86	Issue Type +	En	Location *	WS	
Category	Suppleme	ental	GPS Latitude/Longitude			
Category				Start End		End
Item	DWR UC	P Field Study		39.5233	70 °	39.523370°
пеш				-121.701330 ° -121.701		-121.701330 °
DWR ID DWR_MA0013_02_f _ 2014_26						
		Action/	Comme	nte		

Inspector Comments: FS\_ID:36825

EP NO: 13170

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13H\_2011\_p\_0058 for high water unable to see crossing/9/2013 Same as last

inspection 2/9/2013 Same as last inspection 5/29/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: 36 inch corrugated metal pipe through the levee approximately 7 feet below crown. Flap gate is located on the

waterward side. (13170-1981) FS Date: 6/3/2014 12:45:15 PM

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

A/W: Acceptable but Monitor & Maintain

#### Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	6.12	Rating **	М	Issue No.		27		
LM End	6.12	Issue Type +	En	Location *		WS		
Catagony	Category			GPS Latitude/Longitude				
Category				Start		End		
Itom	ltem DWR UCIP Field Study			39.52251	3°	39.522513	0	
item				-121.706010		-121.706010	0	
DWR ID	DWR_MA0	013_02_f _ 201	4_27					

Action/Comments

Inspector Comments: FS\_ID:36826

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photos of WS slope when cleared. Unable to find WS daylight poin 7/9/2013 Same as last inspection 2/9/2013 Same

as last inspectio 5/29/2014 Same as last inspection.

FIELD STRUCT DESC: 1 of 3: Western Canal siphon crosses the channel. 8-foot by 10-foot concrete conduits through the levee. Top of concrete conduit 4 feet below the crown. Catwalk and guardrails around headwall (USACE-1960). Debris catchment line located at the wings of the headwall. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.13).

FS Date: 6/3/2014 12:47:51 PM

LM Start	6.12 Rating ** M 6.12 Issue Type + En			Issue No.	28	
LM End	6.12	En	Location *	WS		
Catagony	Suppleme	ental		GPS La	atitud	le/Longitude
Category				Start		End
Item	DWR UCI	P Field Study		39.5224	88 °	39.522488 °
item			-121.7060	30°	-121.706030 °	
DWR ID	DWR_MA0	013_02_f _ 201	4_28			

Action/Comments

Inspector Comments: FS\_ID:36827

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photo of WS slope when cleared. Unable to find WS outle7/9/2013 Same as last inspection2/9/2013 Same as last

inspectios/29/2014 Same as last inspection.

FIELD STRUCT DESC: 2 of 3: Western Canal siphon crosses the channel. 8-foot by 10-foot concrete conduits through the levee. Top of concrete conduit 4 feet below the crown. Catwalk and guardrails around headwall (USACE-1960). Debris catchment line located at the wings of the headwall. All conduits are open. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.13). FS Date: 6/3/2014 12:50:23 PM

No Photos

No Photos

Location

U : Unacceptable

A/W: Acceptable but Monitor & Maintain

+ Issue Type Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	6.13	Rating **	М	Issue No.		29	
LM End	6.13	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCIP Field Study			39.52245	7 °	39.522457	. 0
item				-121.706030		-121.706030	٥
DWR ID	DWR_MA0013_02_f _ 2014_29						

Action/Comments

Inspector Comments: FS\_ID:36828

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS slope due to dense vegetation. Need photo of WS slope when cleared. Unable to find WS outlet/9/2013 Same as last inspection2/9/2013 Same as last

inspectios/29/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 3 of 3: Western Canal siphon crosses the channel. 8-foot by 10-foot concrete conduits through the levee. Top of concrete conduit 4 feet below the crown. Catwalk and guardrails around headwall (USACE-1960). Debris catchment line located at the wings of the headwall. All conduits are open. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 6.13).

FS Date: 6/3/2014 12:51:08 PM

	Photo 1 of 1 : FA_2014	MA0013 301	55 20141013	00013.ipg
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No Photos



View of the tree limbs on the landside slope and toe.

LM Start	6.18	Rating **	М	Issue No.	Issue No. 55			
LM End	6.18	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Category			Start	End				
ltem Encroachments			39.5216	34 °	39.521634°			
			-121.706184 °		-121.706184°			
DWR ID	DWR ID DWR_MA0013_02_s _ 2014_55							
Action/Comments								
Tree or limb								

\* Location

LS: Land Side N/A: Not Applicable
WS: Water Side

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	6.23	Rating **	М	Issue No.		12	
LM End	7.62	Issue Type +	En	Location *	LS		
Category	Earthen Levee			GPS La	atitud	e/Longitude	
Calegory				Start End			
Itom	Encroachments ltem			39.5208	43 °	39.502958 °	
nem				-121.706345 °		° -121.716953	
DWR ID	DWR_MA0	013_02_s _ 201	12_12				
Action/Comments							
Ditch							



View of the agricultural ditch along the toe.

LM Start	7.24	Rating **	М	Issue No.	ue No. 30			
LM End	7.24	Issue Type +	En	Location *	LS			
Category				GPS Latitude/Longitude				
Calegory				Start End				
Itom	DWR UC	DWR UCIP Field Study			)5 °	39.507705	0	
Item		-121.713810 °		-121.713810	0			
DWR ID	DWR_MA0							
Action/Comments								

Inspector Comments: FS\_ID:36830

EP\_NO: 5200B

Repair Type: Non-Urgent Crossing Status: Found

FS Date: 6/3/2014 12:54:42 PM

UCIP Comments: No photo available of WS headwall. If possible take photo of WS headwall/9/2013 Same as last inspection12/9/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 8 of 10 items listed under Board Order 5200, 5200A, 5200B: 6-foot by 6-foot reinforced double box culvert (Box 1 of 2) through the levee, 17.1 feet below the crown. Concrete headwalls on both ends. Slide gate on the waterward side. (Permit No. 5200B-1967)

## Levee Inspection Report By Mile - Fall 2014

#### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	7.25	Rating **	М	Issue No.		31			
LM End	7.25	Issue Type +	En	Location *		LS			
Catagory	Category				GPS Latitude/Longitude				
Calegory				Start End					
Itom	DWR UCIP Field Study			39.50757	°	39.507570	0		
Item		-121.713870 °		-121.713870	0				
DWR ID	DWR_MA0								
		A ation /	Camma	nto.					

Action/Comments

Inspector Comments: FS\_ID:36832

EP\_NO: 5200B

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Not found - Need to verify if there are any signs of the structure during next inspection when slopes are cleared. If not will

need to coordinate with applicant regarding the fate of this structur@/9/2013 Same as last inspection. Unable to locate 2/9/2013 Unable to locate/29/2014 Same as last

inspection.

FIELD\_STRUCT\_DESC: 10 of 10 items listed under Board Order 5200, 5200A, 5200B: 36 inch corrugated metal spill pipe through the levee embankment, unknown depth. (Board Order No. 5200B-1967)

FS Date: 6/3/2014 12:59:15 PM

Photo 1 of 1 · FA	2014	MACC 13	2∩1	51	201/11126	00016 ina	

No Photos



View of the controlled vegetation on both slopes.

LM Start	7.82	Rating **	Α	Issue No.		51
LM End	7.82	Issue Type +	Ma	Location *		LS
Category	Earthen Levee			GPS Latitude/Longitude		
				Start		End
Item	Vegetation			39.5004	73 °	39.500473 °
				-121.7188	60 °	-121.718860 °
DWR ID	DWR_MA0013_02_f _ 2014_51					
Action/Comments						

Control annual grass and weeds on the levee slopes and easements.

A : Acceptable
M : Minimally A : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	9.76	Rating **	U	Issue No.	32		
LM End	9.76	Issue Type +	En	Location *	LS		
Catagony	Suppleme	ental		GPS La	titud	e/Longitude	
Category			Start		End		
ltom	DWR UC	WR UCIP Field Study			° 08	39.476260	٥
Item				-121.73623	80 °	-121.736230	٥
DWR ID	DWR_MAG	013_02_f _ 201	4_32				

Action/Comments

Inspector Comments: FS\_ID:36866

EP\_NO: N/A Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this encroachment. Will need to coordinate with LMA Superintendent and DWR-Inspector, photo includes utility contact information/9/2013

Same as last inspection 2/4/2013 Same as last inspection 5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: Buried fiber optic line through the levee at depth unknown. Owner of line is Qwest Communications 1-800 At Fiber

Sign ID Number 16601. (Qwest Communication)

FS Date: 6/3/2014 1:33:40 PM

LM Start	9.78	Rating **	U	Issue No.		33	
LM End	9.78	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS Lat	tud	e/Longitude	
				Start		End	
Item	DWR UC	P Field Study		39.47614	°	39.476140	0
				-121.73639	°	-121.736390	0
DWR ID	DWR_MA0	013_02_f _ 201	4_33				

Action/Comments

Inspector Comments: FS\_ID:36870

EP\_NO: N/A
Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: Authorized/unauthorized encroachment? Contact Chico Local Area Manager, Frank Villalovos 530.342.6140 (o) or 530.624.4048 (c) or email villalovosf@kindermorgan.com for additional

info. Inquiries pertaining to inspeciton submit to

pipelineinquiries@kindermorgan.com and reference as Engr Station

3173+48 plus include coordinate 3/9/2013 Same as last inspection 2/4/2013 Same as last inspection 5/28/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: High pressure line through levee at depth unknown. Owner of line is Kinder Morgan contact information is 213.624-9461. (Kinder Morgan) Applicant was contacted on 7/20/12 by Olivia. I spoke with Ken Yeo, Sacramento Local Area Manager regarding this crossing and he believes its an 8 inch diameter bored line through channel. His contact info is 916.416.7938 or yeok@kindermorgan.com. For addional inquiries regarding crossing contact Frank Villalovos.

FS Date: 6/3/2014 1:37:47 PM

No Photos

No Photos

\*Location

LS: Land Side N/A: Not Applicable WS: Water Side CR: Crown

\*\* Rating

A: Acceptable N: Not Inspected/Rated M: Minimally Acceptable C: Corrected Ob: Design & System Obsolescence

U: Unacceptable A/W: Acceptable but Monitor & Maintain En : Enforcement

\* Issue Type

Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	9.79	Rating **	U	Issue No.		34	
LM End	9.79	Issue Type +	En	Location *	LS		
Catagory	Suppleme	ental		GPS La	titud	e/Longitude	
Category				Start		End	
Itom	DWR UC	IP Field Study	39.47596	° 08	39.475960	0	
Item				-121.73654	10°	-121.736540	0
DWR ID	DWR_MA0	013_02_f _ 201	4_34				

Action/Comments

Inspector Comments: FS\_ID:36874

EP\_NO: N/A Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: Unable to determine if crossing is an authorized or unauthorized encroachment. Unable to find permit number for this crossing. Will need to coordinate with Pacific Telephone to determine if

permit exist for this crossing/9/2013 Same as last inspection/2/4/2013 Same as last inspection/2/4/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: Underground cable through the levee at depth

unknown. Owner of encroachment is Pacific Telephone.

FS Date: 6/3/2014 1:39:40 PM

LM Start	9.99	Rating **	M	Issue No.	35			
LM End	9.99	Issue Type +	En	Location *		LS		
Category	Suppleme	ental		GPS Latitude/Longitude				
				Start		End		
Item	DWR UCIP Field Study			39.47341	0 °	39.473410	٥	
item				-121.73819	0 °	-121.738190	٥	
DWR ID	DWR_MA0	013_02_f _ 201	4_35					
			_					

Action/Comments

Inspector Comments: FS\_ID:36878

EP\_NO: 16994

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Unable to find any indicators for this crossing. It appears that this encroachment was not built. Check again during next inspection/9/2013 Same as last inspection. Unable to locate any signs of this crossing/2/4/2013 Unable to locate/28/2014 Same

as last inspection.

FIELD\_STRUCT\_DESC: 10 inch diameter HDPE conduit containing fiber-optic cables across and under (bored) Cherokee Canal and its levees. Twelve 1.5 inch PVC inner ducts through casing with hand holes placed at each end for initial and future installation of fiber optic telecommunications cable. (Permit No. 16994-2000, Level 3 Comm) FS Date: 6/3/2014 1:47:01 PM

No Photos

No Photos

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side

icable A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	10.14	Rating **	М	Issue No.		13	
LM End	10.64	Issue Type +	En	Location *		LS	
Category	Earthen Levee			GPS La	atitud	e/Longitude	
				Start		End	
Item	Encroachments			39.4715	17 °	39.465113 °	
пеш				-121.739433 °		-121.743592 °	
DWR ID	DWR_MA0	DWR_MA0013_02_s _ 2012_13					
		Action/	Comme	nts			
Ditch							



View of the agricultural ditch along the toe.

LM Start	10.67	Rating **	М	Issue No.		36	
LM End	10.67	Issue Type +	En	Location *		LS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Itom	ltem DWR UCIP Field Study			39.46471	0 °	39.464710 °	
item				-121.74381	0 °	-121.743810 °	
DWR ID	DWR_MA0	013_02_f _ 201	4_36			·	

Action/Comments
Inspector Comments: FS\_ID:36879

EP\_NO: 1238

Repair Type: Non-Urgent Crossing Status: Indicator Found

UCIP Comments: Permit was approved for 6-5/8 inch diameter not 8 inch. The permit granted permission to construct pipe to cross Cherokee Canal, Butte Creek, Clear Creek, & Ash Creek. The O&M manual list an 8 inch steel gas line at HLM 10.67, unable to determine if the gas line is the same crossing. Will need to contact applicant to obtain records/8/2013 Same as last inspection/12/4/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 8-inch gas pipe through the levee at unknown elevation. (Permit No. 1238-1947) Utility marker visible at the upstream face of highway bridge. Buried utility crosses bridge and crosses left bank of Cherokee Canal downstream of highway bridge. This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 10.67).

FS Date: 6/3/2014 1:47:45 PM

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	10.70	Rating **	М	Issue No.	18		
LM End	11.79	Issue Type +	En	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category				Start		End	
Item	Encroachments			39.464305 °		39.450333 °	
пеш				-121.744172 °		-121.753157 °	
DWR ID	DWR_MA0	013_02_s _ 201	12_18				
		Action/	Comme	nts			
Ditch							



View of the agricultural ditch along the toe.

LM Start	13.03	Rating **	М	Issue No.		37	
LM End	13.03	Issue Type +	En	Location *	LS		
Category	Suppleme	GPS Latitude/Longitude					
Calegory			Start		End		
Item	DWR UC	DWR UCIP Field Study			'9	39.434779	0
item				-121.76394	0°	-121.763940	0
DWR ID	DWR_MA0	013_02_f _ 201	4_37				
Action/Comments							

Inspector Comments: FS\_ID:36881

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS pipe & slide gate sedimented in. Limited inspection WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13F\_2011\_p\_0147 for limited visibility of LS and W\$/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall is now visible but mostly underwater so unable to do full inspection. WS is still vegetated2/4/2013 Same as last inspection5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 13.0 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Slide gate in ditch on the landward side. Pipe under channel is a 24-inch Delleher siphon (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 13.03).

FS Date: 6/3/2014 1:52:22 PM

## Levee Inspection Report By Mile - Fall 2014

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	13.55	Rating **	M	Issue No.		19
LM End	14.10	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS L	atitud	e/Longitude
Calegory				Start		End
Item	Encroach	Encroachments			92 °	39.406240 °
пеш				-121.768443 °		-121.794863 °
DWR ID	DWR_MA0	013_02_s _ 201	12_19			
		Action/	Comme	nts		
Ditch						



View of the agricultural ditch along the toe.

LM Start	15.29	Rating **	A/W	Issue No.		54	
LM End	15.29	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS La	atitud	e/Longitude	
Calegory	Start					End	
Item	Animal Co	ontrol		39.4095	48 °	39.409548 °	
пеш				-121.7896	68 °	-121.789668 °	
DWR ID	DWR ID DWR_MA0013_02_f _ 2014_54						
	Action/Comments						

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

### Photo 1 of 1: FA\_2014\_MA0013\_301\_54\_20141126\_00017.jpg



View of the rodent holes and bait station along the waterside slope.

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	15.62	Rating **	М	Issue No.		38	
LM End	15.62	Issue Type +	En	Location *	WS		
Category	Suppleme	ental	GPS Lat	tud	e/Longitude		
Calegory				Start		End	
Item	DWR UC	P Field Study		39.41920	)°	39.419209	0
пеш				-121.77368	°	-121.773680	0
DWR ID	DWR_MA0	013_02_f _ 201	4_38				

Action/Comments

Inspector Comments: FS\_ID:36883

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Could not find LS end of pipe. Limited inspection on WS and LS slopes and toe due to dense vegetation. Need photos of cleared WS and LS slopes, and LS headwall during next inspection. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0011 for WS gate blocked by vegetation/8/2013 WS slope has been cleared of vegetation and is in good condition. LS slope also cleared of vegetation but still very dense on LS toe and unbale to locate LS headwall2/4/2013 Same as last inspection. WS flapgate was bolted shut to keep LS ricefield floode 5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through the levee, 10.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 15.62)

FS Date: 6/3/2014 1:58:47 PM

15.86 Rating \*\* Issue No. LM Start 39 15.86 Issue Type + Location 3 WS LM End En Supplemental GPS Latitude/Longitude Category End DWR UCIP Field Study 39 417043 ° 39 417043 Item -121.777240 ° -121.777240° DWR ID DWR\_MA0013\_02\_f \_ 2014\_39

Action/Comments

Inspector Comments: FS\_ID:36884

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: LS headwall buried. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection. Need to determine the fate of LS headwall. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0022 -unknown issu@/8/2013 Same as last inspection12/4/2013 Same as last inspectios/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through the levee, 9.0 feet below the crown. Flap gate on waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual

(HLM 15.87).

FS Date: 6/3/2014 2:00:36 PM

No Photos

No Photos

\* Location Ma: Maintenance Deficiancy LS: Land Side N/A: Not Applicable A: Acceptable N : Not Inspected/Rated : Minimally Acceptable Ob : Design & System Obsolescence WS: Water Side C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	16.25	Rating **	М	Issue No.		40	
LM End	16.25	Issue Type +	En	Location *	WS		
Category	Suppleme	ental	GPS Lat	titud	e/Longitude		
Calegory				Start		End	
Item	DWR UC	P Field Study		39.41359	5 °	39.413595	0
пеш				-121.78289	0 °	-121.782890	0
DWR ID	DWR_MA0	013_02_f _ 201	4_40				

Action/Comments

Inspector Comments: FS\_ID:36885

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on LS slope due to dense vegetation. Need photos of cleared LS slope and LS headwall. Cracks in riser box. New pump installed recently this work might be covered under seperate permit/8/2013 LS slope has been cleared of vegetation and is in good condition. LS headwall was underwater and unable to be inspected. All WS appurtances in good condition/2/4/2013 Same as last inspection/28/2014 Water appears to be leaking out of the WS concrete riser box. Causing minor erosion under pipe near pump structure.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 11.7 feet below the crown. Slide gate in corrugated metal pipe riser on the waterward slope. Concrete "U" headwall on the landward side. Pipe discharges into distribution box on the waterside. Divers on dam in stream. Pump located on the waterward berm, pumps water from diversion dam into distribution box. Water then flows back through the levee to the landward field. Provision can be made to send water over streambed to irrigation overflow area (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in the O&M manual (HLM 16.26).

FS Date: 6/3/2014 2:01:47 PM

Photo 1 of 1: FA	_2014_MA0013_301_	_20_20141013_00009.jpg
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No Photos



View of the agricultural ditch along the toe.

-						
LM Start	17.05	Rating **	М	Issue No.		20
LM End	18.93	Issue Type +	En	Location *		LS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Category				Start		End
Item	Encroach	Encroachments			0	39.389187 °
пеш					0	-121.821233 °
DWR ID	DWR_MA0	013_02_s _ 201	12_20			
		Action/	'Comme	nts		
Ditch						

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

A: Acceptable
M: Minimally Acceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma: Maintenance Deficiancy

Ob: Design & System Obsolescence
En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	17.06	Rating **	М	Issue No.		41	
LM End	17.06	Issue Type +	En	Location *	LS		
Category	Suppleme	ental	GPS La	titud	le/Longitude		
Calegory				Start		End	
Item	DWR UC	IP Field Study		39.4064	10°	39.406410	0
пеш				-121.7946	00°	-121.794600	0
DWR ID	DWR_MAG	013_02_f _ 201	4_41				

Action/Comments

Inspector Comments: FS\_ID:36886

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Not Found

UCIP Comments: Dense vegetation limited inspection will need to verify

is an features are still present at this location during the next inspection /8/2013 Same as last inspection. Unable to locate2/4/2013 Unable to locate/28/2014 Same as last

inspection.

FIELD\_STRUCT\_DESC: 36 inch corrugated metal pipe through the levee at approximately 14.5 feet below crown. There is a flapgate located on the waterward side. (USACE-1962) This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 17.06).

FS Date: 6/3/2014 2:04:36 PM

LM Start	17.06	Rating **	М	Issue No.		42
LM End	17.06	Issue Type +	Type + En Location *		LS	
Category	Supplemental Supplemental				ituc	le/Longitude
Calegory				Start		End
Item	DWR UC	P Field Study		39.40640	1 °	39.406401 °
пеш				-121.79464	0 °	-121.794640 °
DWR ID	DWR_MA0	013_02_f _ 201	4_42			·

Action/Comments

Inspector Comments: FS\_ID:36903

EP NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Dense vegetation on the slopes restricted the field inspection at this crossing. Need photos of cleared WS and LS slopes, and appurtance \$\frac{3}{8}/2013 \quad Same as last inspection 12/4/2013 Same as last inspection 5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 14.7 feet below the crown. Flap gate on the waterward end. Walkway and slide gate located on the landward end. Concrete "U"

headwalls on both end (USACE-1960).

FS Date: 6/3/2014 2:06:37 PM

No Photos

No Photos

U : Unacceptable

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	18.37	Rating **	М	Issue No.	43			
LM End	18.37	Issue Type +	En	Location *	LS			
Category	Supplemental			GPS Latitude/Longitude				
Calegory	Category					End		
Item	DWR UC	P Field Study		39.39440	6 °	39.394406	٥	
пеш			-121.81318	0 °	-121.813180	٥		
DWR ID	DWR_MA0	013_02_f _ 201	4_43					

Action/Comments

Inspector Comments: FS\_ID:36904

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes. This crossing was listed in the USACE Periodic Inspection report as Corp's inspect ID# USACE\_CESPK\_M13E\_2011\_p\_0134 for unknown culvert size on LS and no outlet visible on W\$/8/2013 LS slope cleared of vegetation and is in good condition. WS is still vegetated. LS pipe end under water and blocked off by plywood so unable to measure culvert size42/4/2013 Same as last inspection.

FIELD\_STRUCT\_DESC: 36-inch corrugated metal pipe through the levee, 13.2 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 18.37).

FS Date: 6/3/2014 2:08:03 PM

Photo 1 of 1: FA	2014	MAAAAA	201 2	1 201/11012	00010 ina
PHOTO I OF F. FA	2014	MAUUIS	30 I Z	1 20141013	pdl.01000

No Photos



View of the agricultural ditch along the toe.

LM Start	19.58	Rating **	М	Issue No.		21	
LM End	20.15	Issue Type +	En	Location *		LS	
Category Earthen Levee				GPS Latitude/Longitude			
Calegory		Start		End			
Item	Encroach	Encroachments			52 °	39.378192 °	
item				-121.8305	65 °	-121.838543 °	
DWR ID	DWR_MA0	013_02_s _ 201	12_21				
		Action/	Comme	nts			
Ditch							

\* Location

LS: Land Side N/A: Not Applicable
WS: Water Side

Rating
A: Acceptable
M: Minimally Acceptable
U: Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type

Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence

En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	20.15	Rating **	М	Issue No.	44		
LM End	20.15	Issue Type +	En	Location *	LS		
Category			GPS Latitude/Longitude				
Calegory	alegory			Start		End	
Item	DWR UCI	P Field Study		39.37819	8 °	39.378198	٥
item				-121.83857	0 °	-121.838570	٥
DWR ID	DWR_MA0	013_02_f _ 201	4_44				

Action/Comments

Inspector Comments: FS\_ID:36923

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Erosion present behind WS headwall. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS and LS slopes during next inspection 7/8/2013 Erosion problem same as last inspection. WS and LS slopes have been cleared of vegetation and are in good shape 2/4/2013 Same as last inspection5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 13.1 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 20.15).

FS Date: 6/3/2014 2:15:51 PM

Photo 1 of 1 : FA_2014_MA0013_301_53_20141126_0001	8.jpg

No Photos



View of the tree limbs along the waterside slope.

LM Start	20.53	Rating **	М	Issue No.		53		
LM End	20.53	Issue Type +	En	Location *		WS		
Category Earthen Levee				GPS Latitude/Longitude				
Category		Start		End				
Item	Encroachments			39.374102 °		39.374102 °		
пеш				-121.843086 °		-121.843086 °		
DWR ID	DWR_MA0	013_02_s _ 201	14_53			·		
Action/Comments								
Tree or lim	Tree or limb							

Location N/A: Not Applicable LS: Land Side WS : Water Side

: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

## Levee Inspection Report By Mile - Fall 2014

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	20.72	Rating **	М	Issue No.	6		
LM End	20.99	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory	egory			Start		End	
Item	Trim / Thi	n Trees		39.3727	24 °	39.370732	
item				-121.8460	22 °	-121.850282	
DWR ID DWR_MA0013_02_s _ 2013_6							
Action/Comments							

Trim trees to at least five feet above ground level.



Trim the trees 5 feet to allow visibility along the landside slope.

LM Start	20.89	Rating **	М	Issue No.		52		
LM End	20.89	Issue Type +	En	Location *	LS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory			Start		End			
Item	Encroach	ments		39.3714	33 °	39.371433 °		
item				-121.8487	53 °	-121.848753 °		
DWR ID DWR_MA0013_02_s _ 2014_52								
	Action/Comments							

Tree or limb

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	21.00	Rating **	U	Issue No.	45		
LM End	21.00	Issue Type +	En	Location *	LS		
Category	Suppleme	ental		GPS La	titud	le/Longitude	
Category				Start		End	
Itom	DWR UCIP Field Study		39.37067	76 °	39.370676	0	
Item				-121.85049	90 °	-121.850490	0
DWR ID	DWR_MAG	013_02_f _ 201					

Action/Comments

Inspector Comments: FS\_ID:36924

EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: LS pipe collars severely damaged--section missing. Buried section of pipe could be in the same condition. Crossing needs to be repair will need to coordinate with applicant. WS slide gate handle missin \$\overline{g}\$/8/2013 Same as last inspection 12/4/2013 Same as last inspectios/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 1 of 3: 16-inch steel pipes encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.00).

FS Date: 6/3/2014 2:16:53 PM

LM Start	21.00	Rating **	U	Issue No.		46		
LM End	21.00	Issue Type +	En	Location *		LS		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCI	39.3706	79 °	39.370679°				
item				-121.8505	° 00	-121.850500 °		
DWR ID	DWR_MA0013_02_f _ 2014_46							
Action/Comments								

Inspector Comments: FS\_ID:36943

EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: Sink hole present on WS. LS pipe collars severely damaged--section missing. Crossing needs repair. Need to coordinate with owne 7/8/2013 Same as last inspection 12/4/2013 Same as last inspectios/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 3 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation

Structure referenced in O&M manual (HLM 21.00).

FS Date: 6/3/2014 2:21:19 PM

No Photos

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	21.00	Rating **	U	Issue No.	47		
LM End	21.00	Issue Type +	En	Location *	LS		
Category			GPS Latitude/Longitud				
Calegory				Start		End	
Item	DWR UCI	P Field Study		39.37067	9 °	39.370679	٥
пеш				-121.85050	0 °	-121.850500	۰
DWR ID	DWR_MA0013_02_f _ 2014_47						

Action/Comments

Inspector Comments: FS\_ID:36925

EP\_NO: N/A Repair Type: Urgent Crossing Status: Found

UCIP Comments: LS pipe collars severely damaged--section missing. Crossing needs repair. Will need to coordinate with owner/8/2013

Same as last inspection 12/4/2013 Same as last inspection 5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 2 of 3: 16-inch steel pipe encased in reinforced concrete through the levee, 9.7 feet below the crown. Concrete "U" headwall on both ends. Slide gates on corrugated metal pipe risers on the waterward slope. Pump structure on the waterward end (USACE-1960). This entry matches the Drainage or Irrigation

Structure referenced in O&M manual (HLM 21.00).

FS Date: 6/3/2014 2:17:46 PM

LM Start	21.60	Rating **	M	Issue No.		48		
LM End	21.60	Issue Type +	En	Location *		LS		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Itom	Item DWR UCIP Field Study			39.3661	55 °	39.366155 °		
item				-121.85988	30 °	-121.859880 °		
DWR ID	DWR_MA0	013_02_f _ 201	4_48					

Action/Comments

Inspector Comments: FS\_ID:36944 EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Needs repair. Internal piping, severe corrosion.

Debris present--rusted pipe stockpiled on LS slope. Limited inspection on WS and LS slopes due to dense vegetation. Need photos of cleared WS & LS slopes. This crossing was listed in the USACE Periodic

Inspection report as Corp's inspect ID#

USACE\_CESPK\_M13E\_2011\_p\_0234 for no WS gate but sluice gate present/8/2013 Pipe appears to have been repaired. Need to talk to inspections and supervisor to find out more deatils on repair2/4/2013 Same as last inspectio5/28/2014 Same as last

inspection.

FIELD\_STRUCT\_DESC: 24-inch corrugated metal pipe through the levee, 8.2 feet below the crown. Crossing penetrates levee at angle. Slide gate in corrugated metal pipe riser on the waterward slope. Pipe crosses the channel (USACE-1960). This entry matches the Drainage or Irrigation Structure referenced in O&M manual (HLM 21.60). Corroded section of exisiting pipe, 9-feet 8-inches of an 18-inch CMP section, was replaced under Permit 7231 prior to 1974. FS Date: 6/3/2014 2:22:25 PM

No Photos

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	22.11	Rating **	U	Issue No.		49		
LM End	22.11	Issue Type +	En	Location *	LS			
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study			39.362103	°	39.362103	0	
item					) °	-121.867820	0	
DWR ID	DWR_MA0	013_02_f _ 201	4_49					

Action/Comments

Inspector Comments: FS\_ID:36963

EP\_NO: N/A Repair Type: Urgent

Crossing Status: Indicator Found

UCIP Comments: Unauthorized Encroachment. This crossing is listed

multiple times in the USACE Periodic Inspection report as

USACE\_CESPK\_M13E\_2011\_p\_0307, 0315, 0317, 0318 for slope failure on LS hinge. DWR-Flood Maintenance Office records shows that CVFPB has requested AT&T to remove conduit in June 2, 2009 letter. LMA working with CVFPB to resolv ₹/8/2013 Same as last

inspection 12/4/2013 Same as last inspection 5/28/2014 Same as

last inspection.

FIELD\_STRUCT\_DESC: Illegal encroachment. Underground telephone cable through the levee. Depth unknown. (AT&T) START latitude 39.36210336, longitude -121.8678207 END latitude 39.35458541, longitude -121.8823409. Line extends from Gridley Colusa Highway to the south end of project levee along LS shoulder & levee crown hinge point. Levee sloughs along cable trench after heavy rains.

FS Date: 6/3/2014 2:30:05 PM

Dhoto 1 of 1 . EA	2014 1400012	204 4 204	11012 00001 :
Photo 1 of 1 : FA	_2014_WA0013	_301_4_2014	+1013_00001.jpg

No Photos



View of landscaping along the toe.

LM Start	22.38	Rating **	М	Issue No.	4			
LM End	22.38	Issue Type +	En	Location *	LS			
Category Earthen Levee			GPS Latitude/Longitude					
Category				Start		End		
Item	Vegetatio	/egetation			82 °	39.359982 °		
пеш			-121.871958 °		8 ° -121.871958 °			
DWR ID	DWR_MA0	013_02_s _ 201	12_4					
		Action/	Comme	nts				
Landscapi	ng							

Location LS: Land Side N/A: Not Applicable WS : Water Side

Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

**FINAL DATA** 

## Levee Inspection Report By Mile - Fall 2014

### **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

22.40	Rating **	М	Issue No.	50		
22.40	Issue Type +	En	Location *	LS		
Supplemental Category			GPS Lat	itud	e/Longitude	
			Start		End	
DWR UCIP Field Study			39.35982	7 °	39.359827	0
			-121.87230	0 °	-121.872300	٥
DWR_MA0	013_02_f _ 201	4_50				
	22.40 Suppleme	22.40 Issue Type + Supplemental  DWR UCIP Field Study	22.40 Issue Type + En Supplemental	22.40         Issue Type +         En         Location *           Supplemental         GPS Lat           Start         Start           DWR UCIP Field Study         39.35982           -121.87230	22.40         Issue Type +         En         Location *           Supplemental         GPS Latitud           Start         Start           DWR UCIP Field Study         39.359827 °           -121.872300 °	22.40         Issue Type +         En         Location *         LS           Supplemental         GPS Latitude/Longitude           Start         End           DWR UCIP Field Study         39.359827 °         39.359827 °           -121.872300 °         -121.872300

Action/Comments

Inspector Comments: FS\_ID:36984

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Unable to locate LS headwall. Need photo of LS headwall during next inspection 8/2013 Same as last inspection.

Unable to locate LS headwall 2/4/2013 Same as last

inspectios 5/28/2014 Same as last inspection.

FIELD\_STRUCT\_DESC: 30-inch corrugated metal pipe through the levee, 15.3 feet below the crown. Flap gate on the waterward end. Concrete "U" headwalls on both ends. This pipe runs on an angle through the levee, then underground along the landward slope to levee mile 22.39 where it enters a ditch on the landward side (USACE-1960).

FS Date: 6/3/2014 2:38:00 PM

Photo 1 of 1: FA	2014 N	/A0013	301.8	20141013	00004 ina
THORD FOLLS A		170013_	.00 1_0_	_20171013_	_oooo+.jpg

No Photos



View of the debris & prunings.

LM Start	22.42	Rating **	М	Issue No.		8	
LM End	22.42	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory						End	
Item	Encroachments			39.3597	07 °	39.359707 °	
пеш				-121.8725	55 °	-121.872555 °	
DWR ID	DWR ID DWR_MA0013_02_s _ 2012_8						
Action/Comments							
Prunings							

\* Location LS : Land Side N/A: Not Applicable WS : Water Side

A : Acceptable M : Minimally A : Minimally Acceptable

U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

A/W: Acceptable but Monitor & Maintain

## Levee Inspection Report By Mile - Fall 2014

# **Sutter Maintenance Yard Maintenance Area 0013**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Cherokee Canal	Left	22.84	11/20/2014 11/20/2014	Bob Duffey

LM Start	22.66	Rating **	С	Issue No.	56		
LM End	22.66	Issue Type +	En	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	alegory				Start		
Itom	Item Encroachments			39.3577	65 °	39.357765	
ILEIII				-121.876378 °		-121.876378	
DWR ID DWR_MA0013_02_s _ 2014_56							
Action/Comments							
Tree or limb							

LM Start	22.83	Rating **	М	Issue No.		7	
LM End	22.85	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory	У			Start		End	
Item	Erosion / Bank Caving			39.3564	98 °	39.356303 °	
item	item				30°	-121.879417 °	
DWR ID DWR_MA0013_02_s _ 2012_7							
Action/Comments							
Note and monitor erosion site.							



View of the along the canal.